

E. OTHER BUILDINGS ON CAPITOL HILL

1. ARCHIVES BUILDING

a. Background and Existing Conditions

The State Archives Administration building was constructed in 1939 as a laboratory for the Utah State Road Commission. In 1984 it was converted to an archives office for receiving, recording and archiving of state documents. Items are photographed, duplicated and then moved to an off-site storage facility. The building houses approximately 50-60 employees, or 10,580 sq. ft on two levels. The Utah State Archives Records Services Administration moved into the



building approximately eight years ago from the Capitol basement and from the Decker Lake remote Archives building (still used to house records). During 1990-1991 Bruce Mia of Brixen & Christopher designed the remodeling plans to convert to an office building. It is classified as a B-2 occupancy under the 1991 UBC.

The building has been built in phases. The original building, a two story cast-in-place concrete frame with a concrete pan roof and floor system, stands to the north. The walls are un-reinforced brick of two wythes with painted stucco applied over the concrete columns and masonry brick infill. There is no basement.

To the east is a lean-to addition attached to the central heating plant with no internal connection between the buildings. To the south is an addition roughly equal in size and design to the original. This southern addition is also a concrete frame with brick infill. However, the roof is metal deck on steel joists clear-spanning east to west. The floor is a concrete pan system with intermediate bearing on columns. The original window frames are steel with single pane glazing and are in good condition. Aluminum storm windows were installed on the inside of the openings. The original windows on the west end were removed, infilled and stuccoed. The interior second pane of glass has been added to all windows, except window wall entrances which remain single-paned. The interior storm panels effectively insulate the original steel windows.

The building has retained the plumbing and electrical items appropriate to a laboratory. There are a series of floor drains in the main corridors. Electrical outlets are located 42" from the floor for accessibility above lab counters.

The floor plan is well organized along a double-loaded single corridor of plastered concrete block. The linear plan results in fairly long travel paths from one area to another. There are: 15 offices, one public records library, one lunch room on the second floor, a film processing lab, one meeting room on the second floor, and restrooms on each floor. The public reference library is located on the first level by the south entrance and is equipped with a handicapped-accessible entrance. Door frames are hollow metal; the doors are solid core wood. An east addition to the building is used as a photographic studio for the preparation of microfilm and other reproductions.

Fluorescent light fixtures are used throughout the building, except the janitor's rooms. Magnetic ballasts

and lenses used in all fluorescent light fixtures are in fair condition. In general lighting is sufficient, although inadequate in the reception station and various offices where the lenses are discolored. Exit and emergency lights do not have battery back up, and some are damaged and/or inoperable. Emergency lighting in the stairway and corridor is inadequate.

The 53 year old buildings appears to be in good condition. Site improvements are minimal with low-maintenance, healthy shrubs on the west and south side. The concrete frame and masonry infill panels have suffered little from settling or seismic activity. The interior was remodeled and painted in 1988.

The mechanical system requires immediate attention to improve function and to increase the operating life. The system, located in a separate mechanical penthouse, poses no threat to life safety, but is not braced for seismic forces. The electrical system requires little new work. The roof, a PVC single ply membrane “Trocac” system, is attached to the deck without ballast. The roof is in good condition with some leaking along the edges. The mechanical penthouse roof of built-up asphalt sheeting has sagged and is temporally braced. It requires occasional reviews.

The building does not meet the occupants’ requirements. Dust, temperature and humidity make it difficult to store archival material properly. As a result, the main archives have been moved off site to a Decker Lake warehouse. Building issues include: The second level of the building is not accessible to the handicapped. There are public and private space layout issues. Installation of new communication and data lines will require asbestos abatement procedures. Seismic evaluations show that concrete frame buildings with infilled walls of unreinforced masonry may incur damage during high-intensity earthquakes.

b. Analysis and Recommendations

Although not in the path of known future development, the Archives Building is expendable. The building is functionally obsolete even if fully renovated. With the building’s seismic vulnerability and lack of requisite heat, light, dust, temperature, humidity and related document and artifact-sensitive controls, the Archives Building would be better put to another use or demolished. However, the building is more than 50 years old, architecturally intact and considered “potentially eligible” for nomination to the National Register of Historic Places (NRHP). It has not been nominated, perhaps because its architectural and historical significance have not meet the NRHP criteria. The building has modest Art Deco stylistic influences. The building’s style and materials are incompatible with the architecture of the Capitol. The location is an inconvenient distance from the Capitol. It may not be necessary to save the building on the basis of historical, aesthetic or functional merit.

If fully renovated, the building may prove useful as an office building. The question is: Is office space of this type needed in this location? To date, no other state agencies have expressed a desire to occupy the building. Maintaining the Archives Building as an office structure would presumably decrease the amount of space needed in a new Annex building. If future parking is underground, there may be little or no demand for use of the site.

In summary, there is no compelling reason to demolish the Archives Building. If the State Archives Department leaves the building for another location, the building may be upgraded and used as an auxiliary state office building. Should no agency want to occupy the building, there is no preservation effort aimed at

keeping it. The building could be demolished and the site landscaped to soften the north edge of the Capitol grounds.

2. BOILER PLANT

a. Background and Existing Conditions

The early drawings of Richard Kletting include a brick boiler plant-- the same structure that stands on the north site of the property just east of the Archives Building. This 1912 building is a modest brick vernacular structure of no great architectural significance. Its original smokestack has been demolished. The old boilers are still present but not used. Gas heat is used for all buildings on the Capitol Hill Campus.

b. Analysis and Recommendations

The Boiler Plant has major deficiencies and we recommend demolition. The non-reinforced masonry building has not been seismically upgraded. In an earthquake of major size it would likely collapse and destroy the mechanical equipment inside. Moreover, the equipment is obsolete and needs replacement. Mechanical engineers recommend replacing the existing plant with a larger up-to-date facility which will meet the future needs of Capitol Hill.

3. GREENHOUSE

a. Background and Existing Conditions

The Capitol Greenhouse currently provides plant stock to the sites of over forty state buildings from Provo to Ogden. Plant stock is grown during the winter months then planted on various grounds April thru June. The greenhouse and grounds staff are also responsible for winter plowing and maintenance of lawns and gardens during the growing season.

The construction is a sloped box with translucent fiberglass panels, bolted aluminum and a galvanized shell system with drainage at the low point of each bay. The long spans of panels are held by trusses and braced horizontally with additional members. No hazardous seismic situation is anticipated, although no engineering analysis has been done.

In 1986 an additional 3,080 sq. ft. was added to the building. The addition included: an office, restroom (does not meet ADA), potting room and a basement storage area. The office area is constructed of hollow metal frames, doors and interior gypsum board with steel studs. The outside walls are fiberglass-reinforced panels with batten joints. The basement /storage area is a secured room for hazardous and potting materials.

The main floor area consists of 12 plant table aisles with a cross aisle through the middle and on each end. Plants are grown by use of up-to-date technology: overhead sprinkler systems, floor drainage trenches, injection systems and auto-sprinkler fans.

Main access to the building is on the north end. There is also access to the parking area on the west. To the west is a vehicle bay and lean-to attached to the central boiler plant. The bay is for the repair of lawn equipment and the lean-to is for storage of hand tools and lawn machinery.

The primary concern is insufficient space. There were four buildings. The two south buildings were demolished to make way for the construction of the Data Processing Center built in 1988. The facility has to provide flowers for all new state buildings, but the greenhouse size has not been increased for eight years. The



staff has become ingenious in space conservation, but better plants could be grown in larger greenhouses. There is no on-site area for expansion. To expand or move the structural frame and siding would be disassembled and reassembled at another location.

Heat for the building comes from the 400 North Street boiler plant. No cooling is needed; the plants are removed during the summer. Powered louvers run along the north side; wall mounted fans run along the south. There is a continuous ridge vent. Lighting is natural with a few well-spaced, waterproof, industrial lights for night.

The building has been functional. Panels will yellow with age and should be painted and replaced. Structurally the frame is in good condition with no upgrading anticipated. There are no apparent signs of settlement or cracking in the exterior walls or slabs. The greenhouse has had a periodic problem along the north side where the ice slides into and damages the louvers. The solution suggested is to extend the eave line beyond the outside wall by approximately 12 inches. The most significant need is the extension of the site drainage line to the street storm sewer system. The current storm drain line does not drain the yard and the sump pump used is a safety hazard.

b. Analysis and Recommendations

The greenhouse serves an important function which would have to be housed elsewhere if the building was razed. There is no great need to develop and use the space the greenhouse sits on, although one proposal has a road passing through the area north of the Data Processing Center to provide access from east to west. If the road is accepted it will require the removal of the greenhouse. The building is a modern, vernacular structure of no architectural significance. However, an expanded replacement facility would need to be constructed off-site prior to demolition.

4. DATA PROCESSING CENTER

a. Background and Existing Condition

Designed by Richardson & R Architects, the Data Processing Building was completed in 1988 as an open

office building to store and handle the computer information and processing needs for the State of Utah.

The construction-- a shear wall box system with Alucabond on exposed concrete walls-- is built into the ground with no windows. It is designed to support 4 additional floors. Footings are concrete spread footings on natural soils and engineered fill. The foundation/main walls are reinforced concrete. The ground/basement floor is a seven-inch concrete slab on grade. The seismic importance factor is 1.5 including anticipated weight of future floors. The existing floor can support 600 to 800 psf and the roof-- a reinforced concrete pan joist and girder system supported on concrete columns-- has been designed for a 200 psf future floor load. Under the 1997 Uniform Building Code this center is over built and extremely resistant to earthquakes.



The open office plan with computer equipment and system furniture is an efficient layout. The system furniture is in fair to good condition. The building consists of 3 sections. The first holds office and department maintenance. The second houses the computer terminals and employee workstations. The third, an approximately 22, 736 sq. ft area, was installed spring of 1992. It houses computer memory and storage. With minor remodeling, cubicle rearranging, etc. the building provides for the departments needs. As technology increases more space will be needed. There is an emergency generator in the facility as well as a back up in Richfield. The third room, housing the computer memory and storage has an inverted roof membrane assembly IRMA which consists of a concrete deck with a 45 mil PVC roofing membrane and 3" of polyisocyanurate insulation board. On top of the 3" insulation is a 1/2" concrete paver bonded to an additional 2" layer of polyisocyanurate insulation over the entire roofing surface. The roofing system on this building appears to be in good condition.

Interior lighting is primarily fluorescent. Two, three and four lamp 2X4' fixtures are recessed lay in types with parabolic lenses. Emergency lighting is provided by parallel emergency generators for egress and exit illumination. In addition to parking lot and walkway lighting, exterior lighting uses a combination of façade and low wattage HID fixtures.

Cooling by a Liebert Co. glycol system uses six exterior dry coolers and 14 interior units. The building is heated by duct and unit mounted electric reheat coils.

The building, situated to meet the first floor of the State Office Building through a short corridor, is a sub-division of Administrative Services and is not maintained by D.F.C.M. The utilities and security systems are financed in house.

b. Analysis and Recommendations



This building houses an essential state function. Its architecture is modest and blends as a northern appendage of the State Office Building. There is no compelling reason to remove the building. When the restoration, new construction, and renovation processes anticipated for the site occurs, the exterior could be re-imaged with new compatible materials and design.

5. STATE OFFICE BUILDING

a. Background and Existing Conditions

The 1960 State Office Building, designed by Scott & Beecher Architects and Engineers, is a 6-story moment resisting space frame that has been seismically retrofitted to the 1991 UBC (Uniform Building Code). It has a basement and penthouse. The auditorium addition is braced frame.

The structural system for the building has concrete spread footings on natural soils. The foundation walls are reinforced concrete. The basement floor is concrete slab on grade. Office floors are concrete slab on steel form decks supported by steel beams and girders. The roofing on this complex has a total of 34,789 sq. ft.. It consists of two sections installed in 1985. The main tower has approximately 26,789 sq. ft. of roofing installed over a metal deck with 3 1/2 " of R-21 rigid insulation board and a 4 ply gravel surfaced built-up roofing system used as the waterproofing membrane. With the same construction the lower roof section has a total of 8,710 sq. ft. The walls are precast concrete non-bearing panels with R-11 batt insulation. Window type is single glazed with metal frames. Doors are painted hollow metal and aluminum storefront. The windows appear to be in fair condition with some leaking problems.

The 1991 interior renovation was completed by Brixen & Christopher Architects with EW Allen Structural, Van Boerum & Frank Mechanical and Key Electrical Engineers as Consultants. The building use has remained the same since renovation. The open office plan with system furniture seems efficient for its current patrons. There is much unused space.

The main building is divided into 2 sections by an expansion joint used as an elevator lobby and a corridor to a 2-story auditorium extending to the north. The three elevators are Montgomery passenger overhead traction type 4000# capacity-- 7 stop.

Lighting systems are primarily fluorescent. Offices, corridors, toilet rooms are illuminated by two, three and four lamp 2'X4' fixtures recessed with parabolic lenses. Corridors and elevator lobbies have 1'X1' recessed parabolic PL lamp fixtures. Recently remodeled, all lighting is new and in good condition. Exterior lighting uses a combination of façade and small wattage HID fixtures in addition to parking lot and walkway lighting. Exterior lighting appears to be in good condition and adequate illumination level. Emergency lighting is provided by a

system of paralleled emergency generators for the egress and exit lighting. Emergency lighting is in good condition and appears to comply with code requirements.

ADA site accessibility is good . Site signage is appropriate in public and service areas, the directional clarity and visibility is sufficient.

The building has been retrofitted to the 1991 UBC standards. It's predicted seismic performance is good. However, precast concrete connections were not seismically upgraded because of budget constraints at the time of retrofit. Because of this deficiency, panels could pose a life-safety falling hazard in a large earthquake and non-structural damage around the exterior of the building could be high. There could also be significant non-structural damage in the interior, because moment frame buildings have high intensity drift in large earthquakes. There are two emergency generators paralleled onto a common bus. They serve: the UPS systems, life safety loads, security systems, selected lighting and power loads. The day tank is mounted adjacent to the generators and needs additional seismic support. No zoning requirements are known for the building. The site slopes south and west. The capitol is to south; residential is to north and west. The building is within one mile of Warm Springs Wasatch Fault.

Due to various additions and upgrades the HVAC is in good condition. The high-pressure steam system from the central boiler plant provides heat. The heating main and glycol systems are in fair to good condition. The steam control valves, traps and condensate receiver and pump sets are in fair to poor condition except for the receiver pump set in the basement main mechanical room. The chillers use R-11 refrigerant, which is on the EPA hit list and no longer manufactured. The equipment room must be brought up to code with separation, refrigerant monitoring system and an exhaust system.

The security system consists of: access control, motion sensors, cameras, monitors and door controls. Fire detection and alarm systems are zoned and non-coded. They have been installed in both buildings and consist of: smoke detectors, heat detectors, flame detectors and horn/strobe enunciators. Alarms are annunciated at the Security office. Systems are ADA compliant.

b. Analysis and Recommendations

Dissatisfaction with the State Office Building falls into three categories: 1) The interior is not arranged for office use. The double-loaded corridors are marginally acceptable, but the office depth is insufficient. 2) The exterior appearance of the building-- its height, box-like shape, bland materials and lack of architectural character-- compares unfavorably with the Capitol. It is architecturally incompatible with the Capitol. 3) The recent costly seismic upgrade may not be sufficient for a major seismic event.

Given the need for the office space and the large sums of money spent on its construction and recent renovation, it is difficult to justify the destruction of the State Office Building. We recommend that the building be retained and improved to enhance its functionality, safety and appearance. The upgrading would include: rearranging the interior non-bearing walls to provide more usable office space, completing the remaining seismic upgrade items, and re-facing the exterior of the building with a design and materials more compatible with the Capitol and proposed Annex.



6. ROUNDDHOUSE/ CAFETERIA

a. Background and Existing Condi- tions

Built in 1960 the Capitol Plaza, known as the Roundhouse, provides food services for the entire Capitol Hill Campus. The roundhouse is located between the Capitol and State Office Building. The enclosed cafeteria is approximately 9,000 sq. ft. with a 4,000 sq. ft exposed, raised perimeter deck. There is

an approximate 15,000 sq. ft pedestrian walkway surrounded by lawn leading to the Capitol and State Office building. There have been no major renovation or upgrades. In 1992 carpet was added and the roof improved. There is access from the rear.

b. Analysis and Recommendations

The Cafeteria would be in the way if a new annex with underground parking north of the Capitol is built. Our investigations have found little support for retaining the cafeteria. It is considered functionally inadequate and architecturally incompatible. We therefore recommend its demolition.

7. PARKING GARAGE AND OUTDOOR PLAZA

a. Background and Existing Conditions

Built in 1960 the Capital Parking Plaza consists of a single level parking structure supporting a landscaped plaza deck. The footprint of the facility is 310 ft by 240 ft-- approximately 75,000 sq. ft at each level. The elevated walkway connected to the office building on the north is approximately 1500 sq. ft.

The primary floor slab system for the supported level is cast-in-place, conventionally reinforced waffle slab system. Floor slab thickness is nominally 3 1/4 in. at column locations. The slab thickness is increased to 19 in. by use of a solid 12 ft 6 in. drop panels. The waffle slab system utilizes 30 in. by 30 in. sq. domes from which 6 in. wide joist ribs at 36 in. centers were formed. Joist ribs are 16 in. deep. Round columns 30 ft on center in each direction support the waffle slab system.

The plaza, an outdoor promenade, provides pedestrian access to the governmental building via an elevated walkway. It includes: an enclosed cafeteria, precast planters (approximately 9,000 sq. ft.) and pedestrian

walkway (approximately 15,000 sq. ft.). The remainder of the plaza (41,000 sq. ft) is lawn area. 1500 sq. ft of elevated walkway is outside of the plaza area.

Designed and built in 1960, the plaza waterproofing system consists of : 4 ply built-up roofing, 1 in. of insulation material and a 3/8 in. sand setting bed directly above the structural slab. Three-inch thick concrete pavers were placed in the sand setting bed. The waterproofing system installed over the elevated walkway was identical to the system installed in the plaza area. The plaza waterproofing system was not installed under the enclosed cafeteria or raised deck area. Extensive repairs on the plaza level in 1972 minimized water leakage through the structural slab.

b. Analysis and Recommendations

Again, with a large Annex and underground parking planned for the area directly north of the Capitol, demolition of the existing parking garage and plaza above will be necessary. We recommend demolition for achieving much greater value from the replacement structures.

8. GAS STATION

a. Comments

A small gas station for state vehicles located along the east section of the lower north wall was recently removed due to environmentally hazardous materials and safety problems. There are no plans to replace it at its recent location against a wall of the historic Capitol. Part of the ongoing programming effort should determine whether another gas station should be provided somewhere on site.

9. WHITE MEMORIAL CHAPEL

a. Background and Existing Conditions

The 1980 White Memorial Chapel constructed by Eldredge & Nicholson Architects is a reproduction of an earlier ward Chapel. It is located at the corner of 2nd avenue and “A” street just east of the Travel Council Building. The original building was a Gothic revival structure, designed by Obed Taylor. Dedicated January 14, 1883, it served for ninety years as a ward chapel and was demolished in 1973.

This reconstruction designed by Steven T. Baird meets 1980 UBC standards. Total floor area is approximately 3,024 sq. ft., 28’X48’ on two levels and a balcony of 12’X28’. The exterior walls



White Chapel

are 12" reinforced concrete block; the roof structure is a pre-engineered truss 24" on center. Buttress caps extend above the roof line and are reinforced masonry. The steeple is original and has been tied into the new reinforced structure. Board insulation was installed between the brick veneer and the structural concrete block walls. A 6" fiberglass batt was installed in the ceiling space. The basement is a cast in place concrete foundation wall, concrete floor slab and finished interior wall. First level floor structure is TJI wood joists and a plywood deck. The roof structure is a built-up wood scissor truss at 2' on center. The load bearing masonry walls are built of concrete block on the inside with brick masonry veneer on the exterior. The interior walls in the chapel are plaster on concrete block. The ceiling is plaster over expanded metal lath.

Its style is Gothic revival masonry and incorporates a number of the artifacts from the original building including: the steeple, cornerstone, leaded glass windows and frames, doors (front doors have varnished Kick plates re-plated in bronze), benches, pulpit and interior woodwork. Brass handrails adorn the balcony wall and stairs. These were not on the original drawings and have been added. The rails are not historic but do not warrant replacement. Handrails on the wall side of the stairs are made of straight pieces that have been poorly attached to the wall and should be replaced.

The interior is primarily painted plaster, drywall and woodwork. The Floors are carpeted, appearing to be original, are now slightly worn and should be considered for replacement within approximately 5-6 years. A wood bead board wainscot around the perimeter of the chapel is painted to match the color of the windows. The windows are opaque glass, which appears to be original. The window lower section once operable is now sealed because of air-conditioning. The ceiling is vaulted to follow the lower chord of the scissor trusses.

The roofing is oiled cedar shingles with a board ridge comb (redwood ridge design). The shingles are slightly curled; some are broken and should be oiled. The steeple, original to the earlier chapel, is also of wood and cedar shingles. The exterior of the building is brick masonry veneer over board insulation and 12" structural concrete masonry units. The exposed foundation wall is plastered concrete. The walls are constructed with buttressed piers in 4 bays, covered with sloped bricks. Some bricks have broken loose and need to be replaced.

Lighting fixtures are all incandescent. The chapel light fixtures are antique Gothic style hanging light. Illumination in the basement is provided by incandescent surface mounted glass fixtures. Finishes are in fair to good condition. The site slopes to the south approximately 6'. As a result, the basement level reception room has four small windows in the south wall to admit natural light.

The mechanical system--a packaged Lennox heating and cooling air-handling unit -- is in a basement furnace room. The chiller is located outside the building on the southwest corner. The supply air is delivered through a perimeter duct system; the air is returned through a floor plenum system.

The chapel has two exits -- the main entrance and an emergency door to the south. The basement level has a direct exterior emergency exit to the south. The restrooms do not meet ADA requirements. Exterior items that need attention are: painting wood windows and resetting pier cap bricks. The cedar roof may need repair or replacement in the next few years.

The building is currently used for weddings and accommodates 160 to 180 guests. This building is in constant demand. Parking is shared with the Travel Council in a lot between the two buildings. The lot will need to be resealed in the near future.

Original drawings for the building detailed an outside amphitheater to the south with much larger arched windows for the reception area. The south facing windows--Gothic arched openings-- for the lower level are shown as full height. Expanding the reception area and enlarging the window openings for the reception room

would make this room more pleasant. It is assumed these features were deleted due to budget constraints and should be reconsidered.

A seismic event would not produce a major hazardous situation; no modifications are recommended.

b. Analysis and Recommendations

The White Memorial Chapel is a fairly new building that has been well-maintained and is in good condition. It functions independently of the Capitol. Therefore it should not be part of the Capitol improvement project.

10. COUNCIL HALL/TRAVEL COUNCIL

a. Background and Existing Conditions

The Travel Council Building is a historic restoration and relocation project. Originally constructed in 1865-66 on First South and Main Street, the building functioned as the City building. It housed many agencies from post office to Police Station to Fire station. The building was in serious disrepair and would have been torn down without the LDS church donating funds to move, rebuild and preserve the original. In 1963, plaster molds were made of all the existing details so they could be remade. Doors and other intact finishes were taken out and restored. The bricks for the exterior were taken off and numbered so they could be reset. The building was then completely dismantled and taken to the top of State Street where it was rebuilt – stone by stone and detail-by-detail.

When the church donated the money to restore the historic building, they stipulated the use as State tourism & information. The building has since been listed on the National Historic Register and famed as one of the 10 most historic buildings in the State. For this reason, there has been little done to the building. When they moved the building they did add a basement, but have kept the integrity throughout the building. Even the original City post office remains--now a brochure and information storage room. The most recent upgrade/remodel was completed in 1989, but not upgraded to meet ADA because of the historic nature of the building.

The main bearing and exterior walls--1'-8" thick sandstone blocks--sit on a concrete foundation forming a basement space (not part of the original construction). Wood joists (2X12) and plywood sheathing frame the floors and the lower roof. The tower is constructed of original materials--wood joists, wood 1X 6 tongue and groove--make up the primary framing supported by steel trusses bearing on the exterior walls. These trusses are located in the lower attic space. Decking on exterior, original sandstone, is uneven and lifting. The sloped roof is a standing seam copper construction and is in good condition. The roof drains thru scuppers down to the sandstone walks below. Ice builds-up on the north side of the building near the main entry walks. This poses a serious slipping hazard. The sandstone walls are in good condition. Wood doors, frames, windows and trim need repair and repainting. Glazing and doors provide minimal thermal protection.



The Interior has been kept as historically accurate as possible. In 1987 a wall to provide extra office space split the southwest room. This historically sensitive renovation matched the original walls in width, detail, molding, door frames and hardware. A more recent remodel combined the west gift store with the tourism office to form a board/conference room. Interior partitions are finished with plaster and provide some degree of fire protection. Wood doors and frames are unrated. The basement level contains several walls of “make-shift” construction. Partitions, doors, frames, and hardware are generally in good condition.

No handicap facilities are available in this building. Toilet rooms are located on the upper and basement levels without handicap access. Historic Register Standards qualify significant buildings to meet modified UBC code.

Four furnaces serve 2 zones. They are located in a small basement furnace room and are in fair condition. The 4 furnaces use DX coils to provide cooling. The single air-cooled condensing unit is located in a small enclosure whose walls may impede airflow and cause service access problems. In general the cooling system is in fair to poor condition. Two small exhaust fans from the restrooms are the only continuously running ventilation in the building. Stratification causes the upper floor to overheat during the summer and in winter it's too cold. The low ventilation rates and multiple exposures make temperature control difficult.

Exterior lighting is minimal. Interior lighting is incandescent to fit the character of the building. Supplemental task lighting has been added where needed. There are no exit signs or emergency lighting systems. The fire alarm panel is an older Notifier panel and appears to be in average condition.

Hot water piping may contain asbestos: none-other was noted.

b. Analysis and Recommendations

The Council Hall is an older building than the White Chapel and more in need of renovation. It is more connected to the functions of government. Work on this building and site is not a priority of the Capitol improvement project.

11. DAUGHTERS OF THE UTAH PIONEERS (D.U.P.) MUSEUM COMPLEX

a. Background and Existing Conditions

1) MAIN MUSEUM

A Visitor from Denmark who visited the pioneer memorial museum later remarked to his Utah friends “As I viewed the relics in that beautiful museum, I felt a great spirit of love. It was as though the people who had owned those things were speaking out to me from the past. Their strength seemed to reach out to me and I wished I might have known them.”

“Utah’s pioneers truly represented the great American spiritual ideal, an ideal compounded by the vision, strength and faith of generations of courageous people who emigrated to this country to escape the religious and political tyranny of older governments in other lands.” (Carter).



The purpose of the “Daughter’s of the Utah Pioneers” organization is to write, publish and tell the stories of the pioneers from their arrival in 1847 to May 10, 1869. This period is referenced in the Museum artifacts. It has only been in the recent past that they began accepting artifacts from 1900’s.

The D.U.P. was founded during the Utah Jubilee in 1897 and artifacts began to be collected. Since that time, the Daughters have moved to various buildings trying to find a place large enough to house their growing collection. They have found shelter in: an old school, the City Tithing house, county buildings, cabins and the State Capitol. When Kate Carter was elected DUP president in 1941, she pledged herself to the task of erecting the museum for the pioneer artifacts painstakingly gathered by the organization. Lobbying persuasively, she wrung from the state legislature a lease on the choice building site at the head of Main Street. Ground breaking ceremonies were held March 25, 1946. Kate B. Carter, Cornelia S. Lund, Ida M. Kirkham and Alice M. Homer removed the first shovels of dirt. Due to continued opposition from property owners on Capitol Hill, constitutionality questions regarding taxpayer funding, and other financial problems, construction didn’t start until October 23, 1947. On July 23, 1950 the building was dedicated and open to the public July 24, 1950.

The museum was designed by architects Lorenzo S. Young and Arnold Ehlers and constructed by Paul Paulsen Construction Co. The building cost a reported \$462, 584.64 and was erected in 1861-62. The concept for the museum came from Zina Y. Card during her presidency. The design is patterned after the historic Salt Lake Theater and characterized by elements of classical revival style architecture. The museum consists of a three-story space with a plate glass diffusing screen at the ceiling below the skylight. In total there are 37 exhibit rooms, each portraying a different part of pioneer life in Utah. The building program includes: display halls, offices, restrooms, boardrooms, lecture halls, souvenir area, storage spaces and a basement. There is a library and manuscript room for researching religious, government and civic transactions.

The building, constructed of reinforced concrete and steel with a terra cotta exterior wall treatment, has approximately 37,800 sq. ft. of floor area. The exterior has ornamentation with relief’s related to the history of the pioneers. The roofing is asphalt tile over sheathing and structure. The upper roof is a single ply membrane with access from a level one janitor’s closet.

The interior has: painted plaster walls and ceiling, wood crown moldings and chair rails, wood paneled walls and fire places. Flooring consists of terrazzo, V.A.T. and carpet. Lights are recessed incandescent fixtures and tracks. The basement has 2’X4’ suspended acoustical ceiling with several badly stained, water damaged tiles. The Lecture room is a 2 story space with carpet flooring, painted plaster walls, wood crown molding and chair rail. There is a raised platform with pulpit and fixed seating.



2) CARRIAGE HOUSE

The first addition to the Memorial Museum was constructed to the north in 1972 . In 1969, an endowment for a carriage house was made to the Daughters by Sara Marie Jensen Van Dyke of Tucson, Arizona. Dedicated on Oct 6, 1973, the Sara Marie J. Van Dyke Carriage House holds the larger pioneer relics-- donated Utah Pioneer vehicles. Ehlers & Gygi architects designed and built the 8,800 sq. ft carriage house with help from Paulsen Construction Co. for \$219, 785.00. The house has two large display halls with small restrooms and support spaces.

This one-story building with basement is constructed of reinforced “Atlas” brick. It has a concrete and steel main floor and a wood roof. The foundation is concrete spread footing on undisturbed natural soil or engineered fill. Existing footings were utilized where possible. The exterior surfaces of the brick have been sand blasted to match the texture on the existing memorial museum. An underground tunnel connects basements of the Pioneer Memorial museum and the Carriage House. This tunnel runs under the existing drive to the parking area. The tunnel is divided from the museum basement with a 4-hour fire rated door system.

3) STEAMER FIRE ENGINE HOUSE ADDITION

In 1999, the addition of a two-level Steamer Fire engine House was completed by Kimberly Construction. It displayed a restored steamer fire engine and related equipment. This addition to the south entry of the existing Carriage house has a lower level room for photography work.

Although the policy of the D.U.P. is to never return donated items. The addition was designed to allow the engine to be moved as part of a traveling exhibit. The original Salt Lake fire engine arched entry and doors have been incorporated into the east elevation. The arched entry and doors were also reproduced on the interior of the building as a backdrop for the fire engine.

The lower level of the building is constructed of a reinforced concrete foundation with a system of steel joists and steel decking. The exterior walls are of reinforced masonry brick, which support the roofs and floors of the new addition. The upper level is constructed of concrete over steel deck supported by steel joists and beams. This addition has been designed to accommodate seismic loads of the new roof and floor. The roof structure is steel truss and joists shaped to form the raised portion of the roof. The design of the new addition repeats the massing and overall shapes of the existing Memorial Museum. The walls are constructed of 8” atlas brick to match the existing carriage house. The Carriage house and Engine house brick was sandblasted to match the existing museum. The rhythm of the pilasters on the exterior wall of the Carriage House is repeated on the Fire Engine House.

b. Analysis and Recommendations

This facility is in sound condition, but poorly maintained . Some problems include: interior paint, exterior facade stains, water leakage at the roof and below grade areas, structural, mechanical and electrical items. We recommend a bi-annual preventative maintenance program.

On site parking for this facility is minimal. Additional parking is provided on the east Capitol Hill Lot. Signage is not effective.

Flourescent lighting harmful to artifacts is a problem. Hundreds of sleeves to protect the artifacts should be changed every few years. DUP is currently looking into new lights also fluorescent but with lower U.V. levels. The display lighting is on track; office lighting is 2’X4’ fixtures installed in a new suspended

ceiling. Emergency egress lighting is not provided. Illuminated exit signs are provided in the basement and main level, but are not powered by an alternate source. The exit doors do not have panic bars.

The south front stairs are in disrepair and hazardous. The decaying stairs also causes concern as they cover the storage facility for the booklets and other items used to raise funds for the building and organization. ADA accessibility is minimal. Restrooms are currently not ADA accessible and located on the second floor. The single elevator is an antique and needs to be evaluated for an upgrade.

Severe leakage in the basement caused tiles to be replaced. With the new addition, phones lines, wiring and speaker system should be improved.

This Open Storage Museum requires minimal storage, maximum display space. The DUP continually turns donations away because they don't have the space to display them. This shortage is a matter of concern to the organization.

In Utah temperature and humidity are not a major concern for the preservation of the archives.

The present pioneers museum contains a relief of an oxen head, which appears in several locations around the building. The relief can be reproduced in a cement aggregate panel and installed on the exterior wall of the addition. This relief can also be applied to the existing carriage house to tie the two together.

2) Recommendations

The 50-year old State supported museum and its new additions function independently of State capitol. Aside from enhancing pedestrian traffic flow to and from the site and improving the parking, we recommend no other work on the museum in conjunction with the Capitol improvement project.

